REMARKS

Claim 1-19 stand rejected and remain pending.

Claims 2 and 12 were amended to correct typographical errors which corrections are unrelated to the Office Action identified above.

Rejection Under 35 U.S.C. §103

Claims 1-19 were rejected under 35 U.S.C. §103 as being unpatentable over Brunelli.

The present invention relates to power equipment having an internal combustion engine that drives a utilitarian device, such as an electrical generator and an air compressor for example. The novel concept recited in the claims is the manner in which the utilitarian device is connected to the vertical crankshaft of the engine. As stated in claim 1, the utilitarian device has a drive connector that is removably connected to the crankshaft to receive rotational force from the engine. In addition to that connection, a support bearing is fixedly connected to either the body of the utilitarian device or the vertical crankshaft of the engine in a manner wherein the weight of the utilitarian device is transferred through the support bearing to the internal combustion engine. Thus, the weight of the utilitarian device is supported through the bearing by the crankshaft of the internal combustion engine. That is significantly different than couplings employed in previous powered apparatus.

All of the claims of the present invention were rejected as being an obvious modification of the vertical engine driven air compressor shown in the Brunelli patent.

Firstly the reference does not have a support bearing that is fixedly connected to either the body of the utilitarian device or the vertical crankshaft of the engine. The rejection contends that bearing 155 in the Brunelli apparatus corresponds to the claimed support bearing. However, bearing 155 is connected between the crankshaft 110 of the compressor (the utilitarian device) and a connecting rod 150 for the compressor piston 100. Therefore, the bearing in the reference is solely connected between rotating components of the utilitarian device and does not qualify as the claimed support bearing because it is not fixedly connected to either the body of the utilitarian device or the vertical crankshaft of the engine. In addition to that connection, the claimed support bearing must also engage the other one of the utilitarian device body and the vertical crankshaft of the engine, another requirement that is not satisfied by Brunelli's bearing 155.

Secondly, the drawings in the Brunelli patent illustrate a powered apparatus in which the engine 25 is bolted to and supported by a housing 75 on a cart. The compressor cylinder 105 also has an integral bracket fastened to that housing. Although, the apparatus illustrated and described at length in the reference has the engine mounted above the air compressor 20, in paragraph [0025] a broad bush statement is made that the engine 25 could be placed below the air compressor with a drive shaft extending vertically upward from the engine. However, even with that modification, there is no teaching or even the remote suggestion in the reference that the weight of the utilitarian device, the compressor, would be transferred through the support bearing to the vertical

crankshaft of the engine. In fact, there still is no suggestion of the claimed support bearing, as noted previously.

Not withstanding the lack of teaching of such weight transfer, the Office Action makes the unsupported statement that it would have been obvious of ordinary skill in the art to modify the air compressor in Brunelli so that the weight is transferred through a support bearing as recited in the presently pending claims. In order to substantiate a conclusion that a claimed combination is obvious, the references must either impliedly or expressly suggest the selection and functionality of the various elements in that combination, *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d 1248, 1250 (Fed. Cir. 1989). The Office Action has failed to show how the Brunelli patent impliedly or expressly suggests weight transfer through a support bearing as specified in the pending claims.

In fact, the obvious alternative arrangement based on Brunelli's teachings would be to bolt the engine to the frame of the cart and also fasten the compressor cylinder 105 to that cart frame above the engine, so that the cart directly supports both the engine and the compressor. This alternative mounting of the Brunelli components is consistent with the conventional practice in the art, as evidenced by U.S. Patent 6,644,264 in which a utilitarian device 16 is supported by and bolted to part 44 of the engine housing. Thus, the prior art teach away from any suggestion of a support bearing through which the weight of the utilitarian device is transferred.

Furthermore, prior to the teaching in the present application, one of ordinary skill in the art would not have found it obvious to have the engine crankshaft carry the weight of the utilitarian device as such weight would exert additional forces on the

crankshaft bearings and other support components. In fact, conventional engineering wisdom dictates that it is desirable to minimize the amount of force that is transferred axially to the crankshaft of the engine.

The rejections of the dependent claims also is based on unsubstantiated assertions. The unreasonableness of these contentions is highlighted with respect to claim 5 which specifies a flywheel attached to the engine crankshaft and having an engine coupling mounted thereon that removably engages the support bearing. As shown in Figure 2 of the Brunelli patent, there is no flywheel at the lower end of the crankshaft that is connected to the air compressor. Therefore, the reference provides absolutely no suggestion of the structure recited in claim 5.

Similarly, claim 6 recites that the engine coupling attached to the crankshaft has an aperture into which a shaft of the utilitarian device is received. Whereas the Brunelli engine's crankshaft extends downward into an aperture in the coupling 115 of the air compressor. Furthermore, because the Brunelli device is not adapted for easy disassembly, it teaches a threaded coupling member 115 at the end of the drive shaft (paragraph [0021]) and does not suggest a coupling with either a non-circular cross section or splines as stated in claims 7, 8, 13, 14, 18 and 19.

Therefore, the rejection has failed to logically establish how the cited art either impliedly or expressly suggests several elements of the claimed invention. As a result, the Office Action has not met the burden of proof required to support the rejection under 35 U.S.C. §103.

Conclusion

For those reasons, applicant requests reconsideration and allowance of the present application.

Respectfully submitted,
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